



INITIATIVE 5: IMPROVE CONTRACTING

EXISTING PRACTICES AND POTENTIAL IMPROVEMENTS

M.G.L. Chapter 161B requires all RTAs to contract with private transportation providers for the operation of public transportation services. Consistent with this requirement, all RTAs have at least one contract with a private operator, and many have multiple contracts.

At present, all RTAs contract independently and there is no formal collaboration between RTAs or between the RTAs and MassDOT to incorporate best practices or standardize approaches. During the meetings that were conducted at the beginning of the Beyond Boston study, many RTA Administrators expressed complete satisfaction with this approach and with their current contracts and contractors. In general, it is the approach that the RTAs feel comfortable with, believe that it provides for an effective working relationship with their contractors and ensure high service quality. However, others reported challenges associated with developing and managing effective contracts, and desired changes that would generate greater competition.

In addition, and as described below, nearly all RTAs contract for service on an “actual cost plus management fee” basis, in which they pay their contractors all direct costs for the operation of service plus a management fee. This is a very different approach than is used throughout most of the country, and leaves RTAs vulnerable to fluctuations in costs that they cannot directly control. Many RTA Administrators reported that dealing with unexpected cost increases was a major challenge.

Based on a review of current contracting practices in Massachusetts and best practices elsewhere, it appears that improvements in contracting practices could:

- Reduce costs through greater competition
- Reduce costs through implementation of better contracting practices
- Better control costs and minimize unexpected cost increases through the use of fixed-price contracts
- Simplify the contracting process.

Finally, to the extent that more effective contracts could reduce costs, additional resources would become available to improve and expand service.

BEST PRACTICES

Findings from National Research

Throughout the country, a large number of transit systems contract for some or all of their service. There are many similarities in the approaches used, as well as differences. To determine which approaches are most effective, a number of research efforts have been conducted. The two that are most widely cited are:

- *TRB Special Report 258, Contracting for Bus and Demand Responsive Transit Services*,¹ which reports on contracting practices and results at 259 small, medium and large sized transit agencies,
- *CUTR Analysis of Contracting for Fixed-Route Bus Service*², which presents the results of several regional and national studies.

¹ Transportation Research Board, 2001.



Key findings from these studies are presented in the following sections:

Contract Terms

One of the purported benefits of contracting is that it encourages competition, and through this competition the cost of services is minimized. The ability of transit agencies to attract multiple bids to their RFPs reflects a variety of factors. Competition can be encouraged by:

- Contracting agencies should provide vehicles and equipment to their contractors. Most of the transit agencies responding to a TRB survey felt that including equipment and vehicles in the contracting process reduces the requirements on the bidders and encourages competition. Including equipment and vehicles in the contracts also protects the transit agency when contracts change hands by reducing the start-up costs and reducing transition time.
- Issuing relatively short contracts with options for renewal.
- Changing contracts periodically. Contracts that have a record of changing hands are more likely to attract competitors than contracts that have long standing relationships with a single service provider.

Cost Basis

Nearly all transit service contracts use one of two cost-basis approaches:³

1. Fixed-rate, in which transit systems pay their contractors a fixed-rate that is tied to the amount of service provided. This is the approach used for the large majority of contracts in the United States. (Note that the cost per hour contracts typically do exclude some items, which are paid on an actual cost basis. Chief among these is fuel, which due to wide price fluctuations, contractors cannot cost-effectively provide on a fixed-cost basis.)
2. Actual costs plus a management fee, in which transit systems pay their contractors for all actual costs for services provided, plus a management fee. This is the approach used by nearly all Massachusetts' RTAs.

Actual Cost Plus Management Fee

With actual cost plus management fee contracts, the risk for changes in costs (for example, labor costs, health insurance costs, and parts) is borne primarily by the contracting agency. Key characteristics of these types of contracts are:

- The contracts are more “comfortable” for the contractors as they effectively guarantee a profit.
- In theory, actual cost contracts may allow contractors to provide lower overall costs, as they do not have to build in cushions for unexpected cost increases.
- However, actual cost contracts also eliminate incentives to reduce costs or minimize cost increases, which over the longer term can result in higher costs.

These types of contracts can require greater effort on the part of the contracting agencies to ensure that contractors control costs.

² Center for Urban Transportation Research, University of South Florida. June 2011.

³ Note that both approaches comply with FTA requirements.



Fixed-Rate Contracts

With fixed-rate contracts, risks for changes in costs are shifted from the contracting agency to the contractor, which can produce much more predictable and stable costs. In theory, contractors need to build in “insurance” costs to cover potential price changes. However, to the extent that they can reduce costs by improving efficiency, they can increase profits. This provides a strong incentive to be as efficient as possible, which can minimize initial bid prices as well as annual increases. The challenge to this approach is providing appropriate oversight to ensure that the quality of service is not affected by “cutting corners.”

Preferred Approach

National experience suggests that fixed-price contracting provide lower costs overall without significantly impacting service quality. Considering the advantages and disadvantages of each approach, the CUTR report recommends that:

“Contracts should, generally, be bid on a fixed-price basis where the contractor is compensated on the basis of the amount of service provided, such as price per vehicle revenue hour. Contractors are rarely compensated for costs they incur in supplying service.”

Contract Length

Contract lengths and renewal terms vary significantly throughout the country. However, the CUTR report recommends:

“To foster competition, a traditional three year contract with two 1-year renewals appears to be long enough to avoid repeated transaction costs that occur with frequent rebidding, yet short enough to ensure that contractor complacency does not develop.”

Labor Costs

The TRB research reports that operating costs savings are the main reason that transit systems contract for service. One of the major sources of savings is in labor costs, as private operators often pay lower wages than public operators. Contractors also often offer public agencies greater flexibility in the use of labor—for example, more flexible work rules and greater use of part-time labor. (In Massachusetts, most RTAs use union labor for major functions, which means that most private operators pay similar wage rates as the RTAs would if directly operating the service.)

Performance Measures

National research demonstrates that, many, but less than half of transit contracts incorporate incentives and penalties in their contracts. According to the TRB research, 25% of contracts provide monetary rewards for good or superior service, and 43% of the contracts include penalties for poor performance. Incentives and penalties can take many forms, but the most common include:

- Customer satisfaction
- On-time performance
- Reliability (miles between breakdowns, etc.)
- Safety/accidents

The primary challenge that transit systems have with incentives and penalties is that they require additional monitoring of the contract and contractor to determine if the standards have been met. However, studies demonstrate the importance of performance measures in ensuring and managing service quality. In addition, the advent of “performance based management” transcends the transit



industry; there are numerous national studies outside of transit that identify the use of performance measures as a “best management practice.”

Summary of National Research

Based on the research conducted, the TRB and CUTR studies recommended that:

- Contracts should be procured on a fixed-price basis, such as price per vehicle revenue hour.
- Contract durations should be limited to three years with two one-year renewal options.
- Contracts should include penalties to discourage poor performance.

State Involvement in Transit Agency Contracting

It appears that Massachusetts is the only state in the country that requires all of its transit systems to contract for service. However, contracting for service is common in most states, and as such, some states are involved in the contracting process of their local transit systems. Relevant examples include:

Iowa

The Iowa Office of Public Transit (OPT) issues a 15-chapter Transit Managers Handbook.⁴ The handbook provides a wide range of information and research about transit operations in the State of Iowa, including contracting. Contracting guidance consists of information and guidance about the contracting process, including:

- When to contract
- Types of service contracts
- Required contract elements

The Handbook provides a checklist for provisions that should be included in a contract, as well as a structure around which contracts can be organized. OPT has also developed a model Purchase of Service contract that it recommends, but does not require, its transit systems to use (and which is for the purchase of service on a unit cost basis).

Massachusetts

The Human Service Transportation (HST) office of the Massachusetts Executive Office of Health and Human Services (EOHHS) manages the state’s HST transportation network. This network includes over \$111 million worth of human service transportation services that provides approximately 5.5 million trips a year throughout the entire state. A major part of the HST Office’s approach involves matching eligible clients with the most appropriate type of transportation service, or to “broker” trips, which involves:

- Arranging consumer trips and contracting for services with local providers
- Monitoring and ensuring service quality (on-site inspections, consumer surveys, etc.)
- Developing routing and other strategies to increase system efficiency and cost effectiveness
- Tracking and reporting system usage and costs and monitoring performance benchmarks

To do this, the HST Office has partnered with MassDOT and the RTAs to implement a system through which RTAs act as HST service brokers. To procure these services, the HST Office issues RFPs to the RTAs for each of its nine regions. These regions are different than the RTA service areas, and as a result, the RTAs provide this service within their own service areas as well as in other areas. Six RTAs—BRTA, CATA, CCRTA, FRTA, GATRA, and MART—provide trip broker services to HST.

⁴ Iowa Office of Public Transit, *Transit Managers Handbook*, April 2011



The HST Office's contracts with the RTAs set performance standards and specific outcome measures that are established and monitored by the HST Office. This approach has been very successful in controlling costs—in FY 2011, while 7% more trips were provided, total expenses rose by only 3% and the cost per trip declined by 3%.

Wisconsin

The Wisconsin DOT (WisDOT) has developed a Procurement Manual that outlines all of the steps that local governments, including transit systems, must follow when contracting for any goods or services that use federal funds.⁵ As part of this process, WisDOT reviews RFPs before they can be released, and also reviews and approves the selection process before contracts can be awarded.

Other States

Practices from additional states include:

- The New York State DOT requires any transit agency contracting for service delivery and receiving state operating assistance to provide a copy of the contract to the Department. These contracts must also include a provision to provide operating statistics and to report on performance measures as required by the Department.⁶
- The North Carolina DOT provides a sample RFP for transit agencies to issue when seeking contractors for vehicle maintenance services.

CURRENT RTA PRACTICES

Contracting Approaches

At present, the RTAs contract with a large number of different contractors (see Table 1). Most RTAs have separate contractors for fixed-route and demand-response service, and several use the same contractor for both types of service. The variety of contractors that are used and the multiple contracts at several RTAs suggest that competition is relatively robust. However, of the country's three largest public transit contractors by revenue—First Transit, MV Transportation, and Veolia Transportation—only First Transit is particularly active in Massachusetts (and First Transit is very active, providing service for BRTA, FRTA, MWRTA, MWRTA, PVTA, and SRTA). The fact that the other two are not active in Massachusetts suggests that competition could be improved.⁷

Nearly all Massachusetts RTAs (all except MWRTA, NRTA and, for some contracts, GATRA) contract for fixed-route service on an actual cost plus management fee basis. As described above, this is a different approach than is used by most other entities that contract for transit service nationally, and different than CUTR's best practices recommendations.

The RTA contracts that do not use the cost plus management approach use variations of the fixed-rate approach. MWRTA contracts for fixed-route service on a cost per service hour basis plus an additional management fee. GATRA and NRTA contract for service on a cost per service hour basis without a management fee (the effective cost of which is rolled into the hourly cost).

⁵ Procurement Manual, Wisconsin DOT, Bureau of Transit and Local Roads, March 2009.

⁶ Rules and Regulations Part 975, Statewide Mass Transportation Operating Assistance Program, (§ 18-b), 1999.

⁷ Veolia does provide service for WRTA, but through an existing contract that it acquired as part of its acquisition of PTM.



Table 1: Overview of RTA Service Contracts

RTA	Fixed-Route Contractor	Fixed-Route Terms	Demand Response Contractor	Demand Response Terms	Other Operating Contracts
BAT	East Coast Transit Services (ECTS)	Cost plus mgmt. fee	Northeast Transit Services	Cost plus mgmt. fee	Councils on Aging (COAs) Intercity bus
BRTA	First Transit	Cost plus mgmt. fee	Americans with Disabilities Act ADA Complementary Paratransit	Per passenger trip	Demand Response COAs and HST
CATA	Not provided to Beyond Boston Study	Cost plus mgmt. fee	Not provided to Beyond Boston Study	Cost plus mgmt. fee	HST Beverly Circulator Route Health Services Links
CCRTA	Eastern Massachusetts Transit Company	Cost plus mgmt. fee	Same as fixed-route	Cost plus mgmt. fee	HST (including for Martha's Vineyard and Nantucket)
FRTA	First Transit	Cost plus mgmt. fee	First Transit in Deerfield, Gill, Greenfield, Montage and Whately. COAs in other areas	Cost plus mgmt. fee	COAs and HST
GATRA	PTM (Taunton/Attleboro) P&B (Plymouth) Churchill (Wareham) Kiessling (Franklin) Bill's Taxi (Mansfield/Norton)	PTM: Cost plus mgmt. fee Others Fixed-rate based on vehicle hours	Same as fixed-route	PTM: Cost plus mgmt. fee Others Fixed-rate based on vehicle hours	COAs, Intercity Bus and HST
LRTA	McDonald Transportation	Cost plus mgmt. fee	First Transit	Cost plus mgmt. fee	COAs
MART	Management Transit Services (MTS)/ Management of Transportation of Gardner Inc (MTSG*)	Cost plus mgmt. fee	Dial-A-Mart (D-A-M)***	Cost plus mgmt. fee	Other fixed-route and paratransit services COAs and HST
MVRTA	First Transit	Cost plus mgmt. fee	Same as fixed-route	Cost plus mgmt. fee	
MWRTA	First Transit	Fee plus hourly	Thompson Transit	Per trip by type	
NRTA	VTS of Massachusetts	Hourly rate plus some direct costs	VTS of Massachusetts	Hourly rate plus some direct costs	
PVTA	First Transit	Cost plus mgmt. fee	Hulmes Transportation Services	Actual Hours of Peak Period Service; Actual Trips during Off-Peak	
SRTA	First Transit	Cost plus mgmt. fee	Same as fixed-route	Cost plus mgmt. fee	COAs
VTA	TCI	Cost for services provided plus mgmt. fee (some functions, including maintenance, not contracted)	Same as fixed-route	Same as fixed-route	
WRTA	PTM	Cost plus mgmt. fee	Same as fixed-route	Cost plus mgmt. fee	COAs

Source: Nelson\Nygaard based on data provided by RTAs.

All three MART contractors (MTS, MTSG, and D-A-M) are the same company doing business under different names.



There is much more variation in contracting practices for demand-response service. Most (9 of 15) still use the same cost plus management fee as for fixed-route service. However, some use different approaches such as a fixed-rate per passenger trip (BRTA and MWRTA), a combination of service hours and cost per trip (PVTA), cost per service hour (NRTA), and combinations of approaches (GATRA).

Several RTAs also hold contracts with other service providers, typically with municipal Councils on Aging (COAs), but also with intercity bus operators. Contracts with COAs are usually for local demand responsive service for older adults and persons with disabilities. However, some COAs assist RTAs with ADA paratransit service and augment fixed-route services for members of the general public by providing local services such as shuttles to/from MBTA commuter rail stations. In some cases, RTAs provide vehicles to COAs and in other cases they do not. A handful of RTAs hold contracts with other service providers, most notably regional bus operators. For example, BAT contracts with an intercity bus operator for regional bus service. GATRA also leases vehicles on behalf of intercity operators, but does not provide funding for operating expenses.

Contract Terms

The RTAs use very different styles, templates and structures for their contracts. Some RTAs use contracts that are very short (5-6 pages) and reference terms and provisions provided in other documents. Other contracts include all relevant information in a single, much longer document. While the organization and structure of each contract is different, there are many similarities. These reflect federal requirements⁸ imposed on any contract involving federal funds as well as practices that have evolved out of RTA operations over time. In general, these common practices include:

- **Staff** – Most contracts specify that the contractors will engage existing transit operating personnel. Contractors are responsible for recruiting, hiring, and training any new staff. Most contracts also specify training requirements, especially for drivers but also for maintenance staff.
- **Vehicles** – For most services, RTAs provide vehicles and the contractors are responsible for vehicle maintenance, including preventative maintenance. Exceptions to this are some of the ADA and demand response contracts with Councils on Aging (COAs); in some cases vehicles are provided to the COAs, and sometimes the municipality provides a vehicle. Another exception is with intercity bus operators, some RTA contracts provide vehicles, while others do not.
- **Vehicle Maintenance** – When vehicles are provided, contracts require vehicle maintenance program and/or specify maintenance expectations (one exception is VTA, which performs its own maintenance).
- **Facilities** – Most RTAs provide administrative, maintenance and vehicle storage facilities. Contractors are responsible for the maintenance of these facilities. In some cases, maintenance of the passenger facilities, including intermodal terminals and parking garages are included in contracts. In a few cases, contractors are allowed to bid out that work.
- **Insurance** – RTAs typically require the management team to obtain and maintain a variety of different types of insurance. Contracts almost always specify the amounts and types in the contract document.
- **Safety** – Contractors are responsible for ensuring all employees, including drivers, adhere to safety standards, including safety and accident prevention and maintaining safety records.
- **Reporting** – Contracts specify requirements associated with submitting management, performance and other reports.
- **Consulting and Technical Assistance** – Nearly all contracts look to their management team to provide ad hoc consulting and technical services. Most of these costs are included contract

⁸ Federally required contract clauses include provisions associated with energy conservation, clean water, anti-lobbying, access to records, clean air, no obligation by the Federal Government, program fraud and false or fraudulent statements, civil rights, disadvantaged business enterprises, ADA, etc.



management fees, but some RTAs pay additional fees to have special technical services provided on an as needed basis.

While many of the contracting terms are similar, there are several areas where contract terms differ. The following section provides additional detail some critical contracting terms and compares and contrasts contracting practices. It focuses on the larger contracts held between RTAs and fixed-route and ADA paratransit operators, rather than the smaller service specific contracts that are held with COAs and intercity bus operators. In cases where smaller contracts are referenced, they are called out specifically.

Contract Lengths and Cost Escalation Rates

Most RTA contracts are set for a fixed-term with optional extensions for an additional period of time. Five of the 15 contracts were issued in 2011, and most of the remainder issued between 2007 and 2010. Exceptions include GATRA and CATA. Three GATRA contracts, issued in 2004 or 2006, are being put out for rebid over the next two years. (At the time this document was prepared, the study team had not received finalized contract information from CATA.)

- Most contracts are for a period of three years with two optional one-year extensions (see Table 2). This is consistent with best practices reported elsewhere.
- Three contracts—CATA, FRTA and VTA— are issued for only a single year, but with four one year extensions.
- Three contracts—GATRA, MART and MVRTA—are for five-year periods. MART's contract does not specify an extension option, but MVRTA's contract allows for a five-year extension.

Table 2: RTA Fixed-Route Service Contracts – Contract Lengths and Cost Escalation Rates

RTA	Start Date	Term (Years)	Extensions	Escalation Rate
BAT	2007	3	Two 1-year	1.3%
BRTA	2011	3	Two 1-year	2.7% - 3.0%
CATA	2008	1	Four 1-year	n/a
CCRTA	2011	4	One 1-year	1.6% - 2.7%
FRTA	2008	1	Four 1-year	n/a
GATRA	2004 - 2006	5	One 3 year One 1-year	3.0%
LRTA	2010	3	Two 1-year	3.75%
MART	2008	5	Not specified	3%
MVRTA	2007	5	One 5-year	4.0%
MVRTA	2011	3	Two 1-year	3.9%-2.7%
NRTA	2011	3	Two 1-year	2.5%
PVTA	2011	3	Two 3-year	2.0%-2.5%
SRTA	2011	3	Two 1-year	0%-2.5%
VTA	2007	1	Four 1-year	2.0%
WRTA	2004	3	Two 1-year ⁹	n/a

Source: NN based on contracts provided by RTAs

In most cases, contracts specify the escalation rates that will be assigned to the management fees over the life of the contract period. In recent years, escalation rates have ranged from 1.3% (BAT) to a high of 4.0% (MVRTA).

⁹ Although the contract has been extended for six one-year periods. WRTA plans to readvertise in 2012.



Management Personnel

Most fixed-route contracts pay a management fee to the contractor that includes the salary of the General Manager (GM), plus a fee or profit to the operating company. However, three RTAs pay for the cost of additional management personnel:

- Two RTAs (PVTA and CCRTA) also include an Assistant General Manager (AGM) position in the contract.
- MVRTA contracts for a large management team that includes salaries for a GM as well as an AGM for Maintenance, an AGM for Operations, an AGM for Human Resources, a Director of Paratransit and a Manager of Marketing.

Six RTAs have separate contracts for ADA or demand response services. Of these six RTAs, only three (BAT, LRTA, and MART) use the actual cost plus the management fee approach, and all three include a separate GM or AGM position dedicated to ADA service. In the case of MART, although the contracts are issued separately, the contractor is essentially the same organization with same GM designated for all three services. The remaining three RTAs (BRTA, PVTA and MWRTA) contract for ADA services on a per trip or hourly basis, and these contracts do not specify management personnel.

Labor

In most cases, RTA contracts specify that new contractors must retain all existing employees. This means that even if the management team changes, the individuals operating the transit system, including drivers, dispatchers, mechanics, and other personnel remain the same. In most cases, the management team will create a new wholly-owned local subsidiary company that employs current staff and continues the existing employment practices and rules. If existing staff are members of a union, contracts also typically require the management team be bound by the terms and conditions of the existing collective bargaining agreement. As additional employees are needed, the contractor is responsible for recruiting, hiring and training these individuals. This is standard practice throughout the county.

At the RTAs with union labor, the RTA contractors conduct labor negotiations. For the RTAs that have actual cost plus management fee contracts, the situation exists where contractors negotiate costs that they will not pay directly but will instead pass on to the RTAs. This eliminates the incentive that exists with fixed-price contracts for contractors to minimize costs. However, the RTAs do provide their contractors with input on acceptable costs, terms, and related elements that the contractors then use in their negotiations. For agencies that contract on a fixed-price basis (largely outside of Massachusetts), contracting agencies typically do not have any involvement—either direct or indirect—in labor negotiations and resulting costs are not passed on to the contracting agencies.

Performance Measures

About half of the fixed-route and combined fixed-route and ADA contracts contain some mention of performance measures. Most of the language, however, is general and does not spell out clear expectations. For example, five contracts (GATRA, FRTA, MVRTA SRTA and WRTA) contain language that reference annual work plans that will be negotiated and will include performance standards¹⁰. The performance measures are not specified, nor are they clearly tied to the payment for service. For example:

- CCRTA's contract specifies a handful of performance measures, but the measures are very general and are not tied to payment.
- MWRTA's contract includes performance measures that are more specific as compared to others, but they are not directly tied to payment.
- VTA's contract has limits on overtime.

¹⁰ These work plans have not been reviewed as part of the Beyond Boston process thus far.



PVTA is the only RTA that includes very specific performance criteria in their fixed-route contract and ties these criteria to payment. The performance measures include a variety of metrics, including on-time performance, customer services, safety performance, personnel management and reporting. Each of these criteria is also linked to specific financial incentives and penalties, thereby clearly linking performance and payment.

Performance measures are much more common among the contracts for ADA paratransit services, especially among the contracts that do not follow the actual cost plus management fee model. BRTA, for example, reimburses its ADA provider based on the number of trips provided and sets specific service criteria for these trips. Many performance measures are also designed to ensure that service will comply with ADA requirements. VTA sets on-time performance criteria in its ADA contract as well as productivity ratios in terms of the number of passengers carried per vehicle hour. MWRTA also sets productivity goals for its contractor, which like PVTA, are set in terms of passengers carried per vehicle service hour.

Measures to Limit Cost Escalation

Nearly all contracts for fixed-route service include some measures to limit cost escalation over time. The most common of which is a prohibition on the hiring of additional personnel without direct approval from the RTA. Several contracts also include provisions against substantially increasing pay rates without approval from the RTA. Other terms limit the amount of overhead hours.

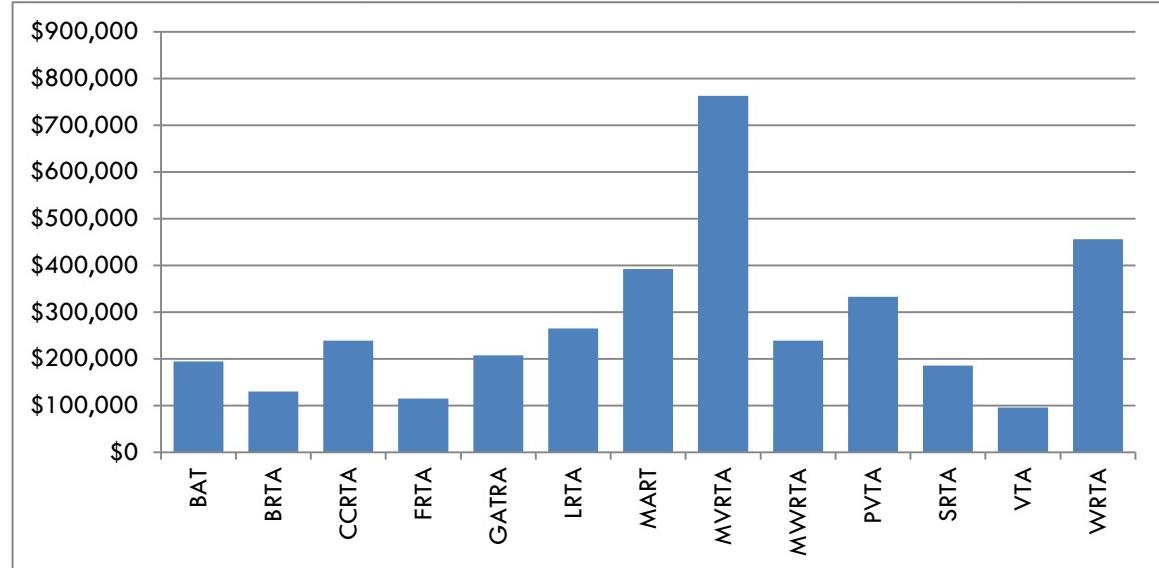
Cost-Saving Measures

Contracts for demand-response services are more likely to include incentives for cost saving than fixed-route contracts. With demand-response service the relationships between service costs and productivity are more direct because higher rates of passengers per vehicle service hour almost always means more trips are grouped and rides are shared, which lowers service costs. Consequently, several of the contracts specify goals or requirements for the number of passengers carried per vehicle hour. BRTA contracts for demand-response service based on a per-trip cost, with costs varying by vehicle ownership (BRTA pays less for trips made on BRTA vehicles). BRTA's contract also clearly specifies a shared-ride trip rate that is designed to encourage shared rides and reduce BRTA's costs.

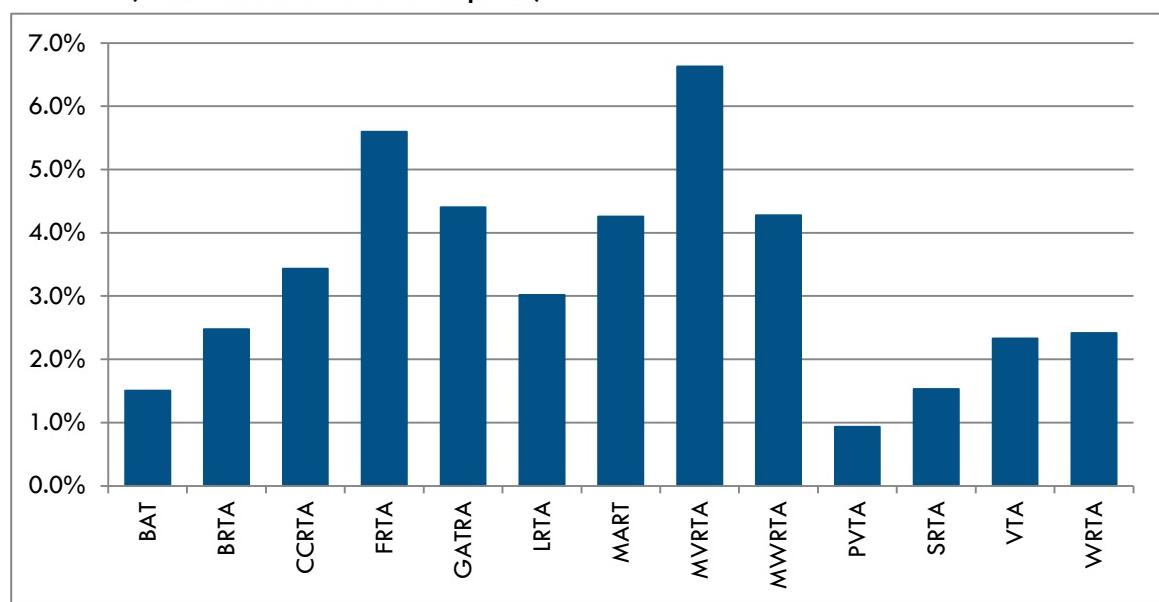
Management Fees

The management fees paid by RTAs to their contractors varies considerably, ranging from a low of \$95,000 by VTA to a high of \$763,000 by MVRTA (combined fees for fixed-route and demand-response service) (see Figure 1). The amounts are all bid amounts and reflect contractors' estimates of what they believe they can include in a successful bid. The average management fee paid by RTAs is approximately \$270,000. VTA's low fee reflects the small size of the system and the fact that service is largely seasonal. MVRTA's high management fee reflects the large management team approach adopted by that agency.

As a percentage of total operating expenses, management fees range from a low of less than 1% at PVTA and SRTA, to a high of 6.6% at MVRTA (see Figure 2). The average fee paid is approximately 4%. These percentages to a significant extent reflect system size, with larger systems generally having lower fees as a percent of total costs, and smaller systems having higher costs (because at larger systems, labor costs for management personnel are spread over a larger base). Still, there are significant differences that cannot be explained by system size.

**Figure 1: RTA Contracted Management Fee – Includes Fixed-Route and ADA Service (2011)**

Source: NN based on contracts provided by RTAs. Amounts are factored to reflect 2011 costs where possible. Data is not reported for CATA because at the time this initiative was written, only a draft contract was available. GATRA fees reflect only the cost plus management fee contract with PTM, as their other contracts are fixed-rate contracts that do not include a management fee. NRTA not included due to different contracting practices.

Figure 2: RTA Contracted Management Fee as a Percentage of Operating Expenses (Fixed-Route and Demand Response)

Source: Management free reflects amounts provided in RTAs contracts factored to reflect FY 2011, where possible. Operating expenses from NTD and are for 2010. GATRA expenses estimated for PTM contract area. NRTA not included due to different contracting practices.

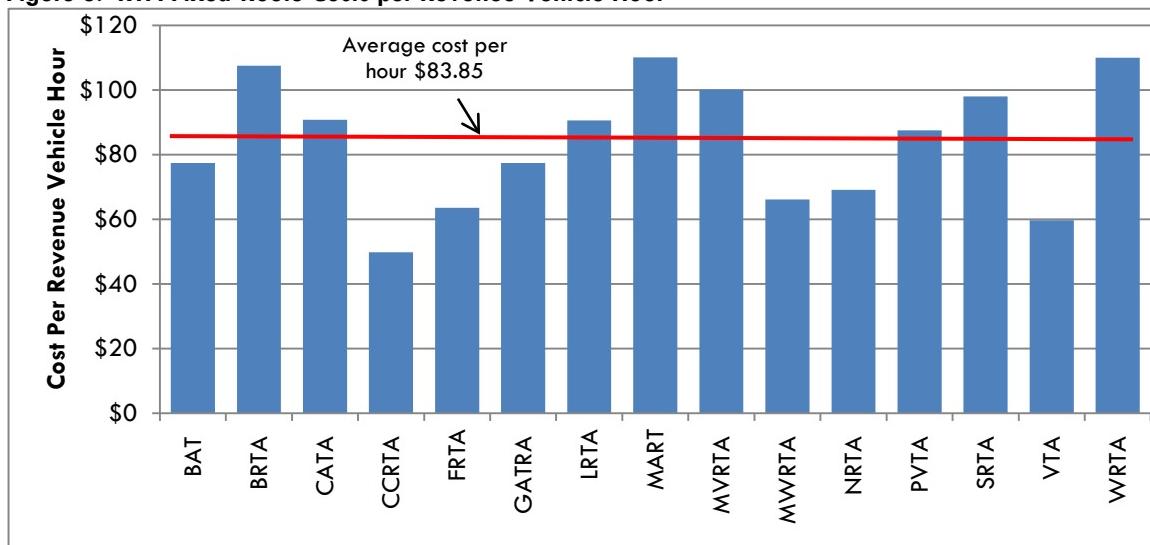
Cost of Service

There are a number of factors that influence the cost of service, including differences in service areas and service types, and whether or not union labor is used (and labor almost always comprises the largest cost



component). That said, there are larger than expected differences in the average cost of fixed-route service pre revenue hour. Throughout the state, the cost per service hour for fixed-route service ranges from a low of \$59.30 at CCRTA to a high of \$109.90 at WRTA (see Figure 3). The average cost among all RTAs is \$83.85.

Figure 3: RTA Fixed-Route Costs per Revenue Vehicle Hour



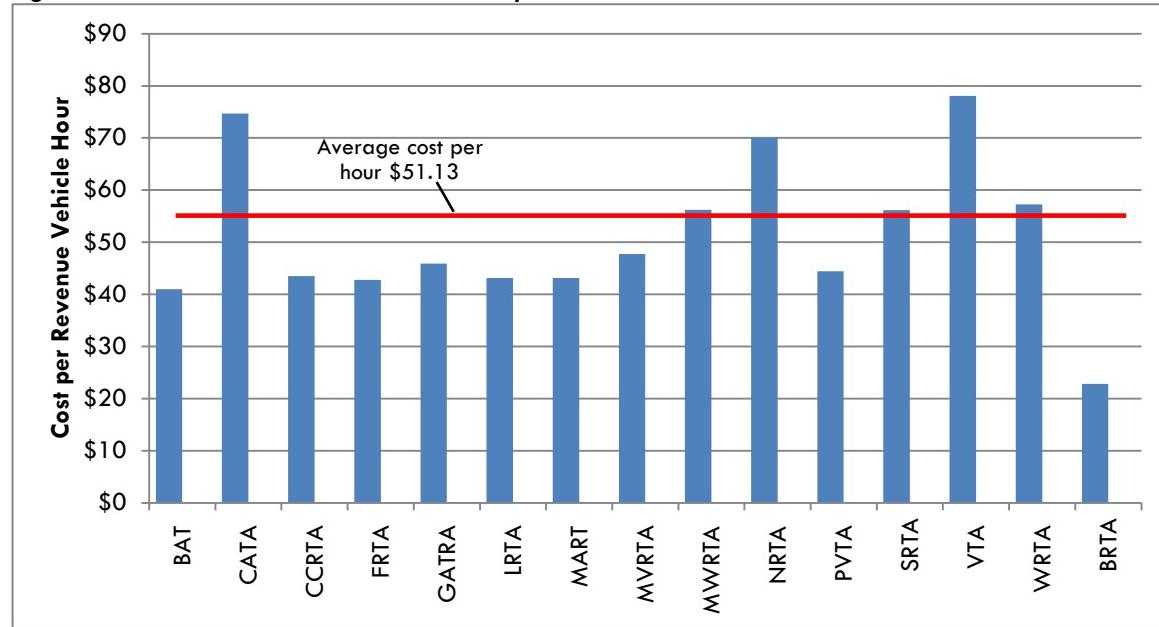
Source: 2010 NTD

Some of the differences in service costs may reflect contracting practices. RTAs that follow an actual cost plus management fee plus cost model, for example, pay an average of \$86.34, which is about 30% higher than the \$66.17 hourly cost achieved by MVRTA, which uses a fixed-rate approach. Other notable findings are that while PVTA has a marginally higher than average hourly costs, the inclusion of performance incentives and disincentives does not appear to significantly increase service costs. MVRTA's large management team, on the other hand, has not appreciably lowered average service costs.

Costs for demand-response service range from a low of \$22.13 at FRTA to a high of \$78.09 at VTA (see Figure 4). The statewide average is \$51.13, and half of RTAs have costs that range from \$40 to \$45 per hour. Of the five RTAs with the lowest per hour service costs, four contract for ADA services separately.

HST Service

Six RTAs (GATRA, MART, FRTA, BRTA, CCRTA and CATA) are contractors to the Massachusetts Human Service Transportation (HST) Office. In these cases HST contracts with the RTAs to broker human service transportation for clients of MassHealth, the Department of Development Service and the Department of Public Health. The RTAs do not provide the actual service, but instead work with a multitude of transportation service providers to manage, broker and coordinate transportation services for HST clients. HST contracts are worth noting because they demonstrate the multiple roles some RTAs play in terms of both contracting with service providers and being contracted to provide management services. HST contracts are also relevant because they offer an example of best practices in contract management with performance standards tied to specific outcome measures. The use of these contract terms between a state agency and local RTAs also demonstrates the capacity of the RTAs to successfully operate within a performance-based environment.

**Figure 4: RTA ADA Paratransit Service Costs per Revenue Vehicle Hour**

Source: 2010 NTD, paratransit service costs largely have HST trips removed.

ROLE OF MASSDOT

To date, MassDOT has not been actively involved in the RTA contracting process. MassDOT does, however, have such authority as specifically provided in Section 23 of Chapter 161B. This statute outlines the Commonwealth's role in paying contract assistance and specifically states that:

"Any contract under this section shall include such provisions as the secretary deems necessary and desirable to assure the efficient operation of the authority and the minimum burden on the commonwealth and on the cities and towns within the authority, and to insure contract assistance is provided for projects which are consistent with the program for public mass transportation of the authority."

As described above, it appears that changes in contracting approaches, especially shifting from an actual cost plus management fee approach to a fixed-fee approach, could produce meaningful cost savings and more predictable costs. As such, and considering that the state is the major funding provider for RTA services, it may be appropriate for MassDOT to become more actively involved in the RTA contracting process.

SUMMARY OF ISSUES

There is wide variation in contracting practices among Massachusetts RTAs, creating a system that differs from national industry trends and best practices achieved by other agencies in the Commonwealth. Consequently, there are opportunities for improvement.

MassDOT has largely been absent in the contracting process. At least partially as a result, RTAs have adopted a variety of different approaches and styles that have produced a wide range of outcomes. Compared to the Massachusetts HST Office, for example, MassDOT exerts very little influence or control



over RTA contracts. The HST Office example demonstrates the potential benefit associated with state involvement in the contracting process. The Office maintains a staff of 11.5 individuals and also pays higher management fees to the RTA brokers than the fees paid by the RTAs to their management teams (6% as compared to an average of 4%). However, the Office remains involved in the oversight of service delivery using an extensive database to monitor performance and evaluate services, respond to changes in the industry and enforce statewide standards and expectations. Hands-on management of the brokerage contracts also likely contributes to the Office's success at cost containment—while the demand for service increased by 66% between FY 2004 and FY 2010, the cost of service increased by only 19%. By comparison, RTA ridership increased by 25 to 30% and costs increased by more than 60%.¹¹

RTA contracts show mixed efforts in tailoring contracts to specific services. With some exceptions, such as the five contracts held by GATRA in different parts of their service area, and contracts with COAs and intercity bus operators, most RTAs rely on a single provider for all their transportation services. All but five RTAs, for example, contract with the same management team for both fixed-route and ADA paratransit services. In general, the RTAs that issue separate contracts tend to include more specific terms and performance measures; these smaller, more specialized contracts are more likely to be fixed-price contracts and also tend to realize lower costs overall.

Areas where most RTAs are not in line with national trends and best practices are bidding contracts based on a fixed-price basis and careful monitoring of contractor performance through the use of financial penalties and incentives. Transitioning to fixed-price contracts would offer several critical advantages for the RTAs. First, fixed-price contracting means services costs will be more predictable, working to alleviate some of the uncertainty inherent in the RTAs existing operating and funding environment. Fixed-price contracting also shifts the responsibility for cost containment to the contractor, thereby freeing RTAs to focus on service quality. Another key advantage of using fixed-price contracts in Massachusetts would be to provide stronger incentives for contractors to better control labor costs, since they would not be able to pass on cost increases to the RTAs. While some RTAs disagree with this approach due to concerns that service quality would suffer, national research and local experience suggest otherwise. Furthermore, service quality could be protected through the use of performance measures.

While RTAs may use performance measures to monitor contractor performance and service efficiency, these performance measures are not widely incorporated into contracts. This practice has been identified as a best practice nationally and the local example provided by the HST Office offers considerable evidence that performance measures and monitoring can lead to more efficient operations and also help maintain service quality. The lesson from the HST Office suggests that management costs will increase; indeed the management fees paid to brokers is nearly double the average paid in RTA contracts, but the increased monitoring has led to more effective cost containment system wide.

ACTIONS TO CONSIDER

Potential improvements and actions that might be considered to address the above issues include:

1. Most Massachusetts RTAs contracts use an actual cost plus management fee model in their contracts. The transit industry, however, largely uses a fixed-price approach to contracting. Should MA transition to a statewide fixed-price approach?
 - What are the benefits or concerns related to this approach?
 - Is technical assistance required to facilitate this approach?

¹¹ RTA operating expenses and ridership trends based on 2010 RTA Profiles prepared by Nelson Nygaard as part of the Beyond Boston study, but excluding data for FRTA and MWRTA which were not in existence in 2001.



- Are there lessons to be learned from the RTAs (NRTA, MWRTA and GATRA) that use fixed-price contracting?
 - What measures might be incorporated into fixed-price contracts to ensure service quality is maintained?
2. Several RTAs institute best practices that were developed through several years of experience with contracting. These best practices, however, are not universally applied.
- How can RTAs be encouraged to use lessons learned by others in their contracting practices?
 - Should contracting best practices be documented and shared with all RTAs?
 - Is other peer-to-peer training appropriate? Would it be helpful to hold a workshop to discuss best practices and lessons learned in contracting?
3. RTAs that issue separate contracts for fixed-route and ADA/Demand Response services achieve lower costs. The RTAs that issue separate contracts are also more likely to include performance and cost savings measures.
- Should RTAs be required to issue separate contracts for fixed-route and Demand Response services?
 - Are there specific performance measures that should be included in Demand Response contracts?
 - Are there specific cost containment strategies that should be included in Demand Response contracts?
4. National data suggests shorter contract lengths and limited extension periods encourage competition, something that is currently lacking in Massachusetts.
- How could RTAs attract more competition in the RFP process?
 - Are there other aspects of the contracting process that need changing?
5. Should MassDOT take a more active role in monitoring contract performance and trends, providing technical assistance, and ensuring contracts are structured to gain statewide efficiencies?
- Should MassDOT look to the HST Office as a model for contract oversight? Do RTAs that are HST brokers see any benefits from this approach?
 - How else could MassDOT support RTAs in their contracting efforts?
 - Should MassDOT develop standards and policies to guide contracting practices?
 - Limit the size of the management team?
 - Issue standard terms for maximum contract duration and renewals?
 - Require performance measures?

FOR MORE INFORMATION

Analysis of Contracting for Fixed Route Bus Service, National Center for Transit Research, University of South Florida, June 2011:

<http://www.nctr.usf.edu/wp-content/uploads/2011/08/77923.pdf>

Iowa Transit Managers Handbook:

<http://www.iowadot.gov/transit/handbook.html>

Massachusetts RTA Enabling Legislation, M.G.L. Chapter 161B:

<http://www.ma legislature.gov/Laws/GeneralLaws/PartI/TitleXXII/Chapter161b>

Special Report 258, Contracting for Bus and Demand Responsive Transit Services, Transportation Research Board (TRB), 2001.

<http://onlinepubs.trb.org/onlinepubs/sr/sr258.pdf>

2010 Annual Report, Commonwealth of Massachusetts Executive Office of Health and Human Services, Human Service Transportation Office FY 2011:

<http://www.mass.gov/eohhs/docs/hst/hst-annual-report-fy10.pdf>